BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK :CONSTRUCTION OF HOSPITAL BUILDING IN WARD NO. 11 (KUVEMPUNAGARA) IN VIDYARANYAPURA SUB DIVISION

(4)ELECTRICAL

Est.Cost.Rs. 341845

Page No	Sl no	Description/Specification	unit	Basic Rate	Quantity	Total Rate
	1.00	**PVC CONDUIT & ITS ACCESSORIES**				
2	1.2	Concealed Conduit System Supplying heavy gauge PVC conduit pipe ……mm dia .....mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary				
2	1.2.1	19/20mm dia 2mm thick(including audio system)	Mtr	43	200	8600
2	1.2.2	25mm dia 2mm thick	Mtr	57	95	5415
2	1.2.3	32mm dia 2.5mm thick	Mtr	90	20	1800
3	1.7	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete.				
3	1.7.1	upto 50mm conduit in brick wall	Mtr	21	37	777
3	1.7.2	upto 50mm conduit CC floor	Mtr	38	5	190
3	1.8	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, screws at an interval of 300mm …. etc. as required.				
3	1.8.2	25mm	Mtr	26	10	260
3	1.8.3	32mm	Mtr	35	10	350
3	1.9	Supplying PVC/GI flexible conduit pipe…mm dia fixing on surface over inverted tapered wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and on either end of the pipe terminated completely				
3	1.9.2	25mm	Mtr	30	20	600
3	1.12	Supplying And Fixing Metal Fan Box with Round Hook.	No	92	3	276
	2.00	**WIRES & CABLES**				
5	2.3	Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2X1.5Sq.mm Cable confirming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. GROUP A				
5	2.3.1	Short point upto 3Mtr from tapping point to out let via switch box	Point	144	3	432
5	2.3.2	Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	Point	215	10	2150
5	2.3.3	Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	Point	334	25	8350
6	2.3.4	Two outlet in a row, above 3Mtr upto 6Mtr from tapping point to out let via switches	Point	423	3	1269
6	2.3.5	Three outlet in a row, above 6Mts upto 10Mtr from tapping point to out let via switches box	Point	593	5	2965
6	2.5	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A.				
6	2.5.2	1.5 sqmm	Mtr.	18.6	800	14880
6	2.5.3	2.5 sqmm	Mtr.	29.2	100	2920
6	2.5.4	4 sqmm	Mtr.	42.1	300	12630
6	2.5.5	6 sqmm	Mtr.	63.8	75	4785
6	2.5.6	10 sqmm	Mtr.	108	180	19440
	3.00	**SWITCHES SOCKETS & ACCESSORIES**				
15	3.5	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall				
15	3.5.1	1-3Way	Each	91	7	637
15	3.5.3	6Way	Each	121	3	363
15	3.5.4	8Way	Each	140	3	420
16	3.5.5	10-12Way	Each	159	4	636
16	3.6	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.				
16	3.6.1	1 to 3 Module	Each	109	7	763
16	3.6.3	6 Module	Each	173	4	692
16	3.6.4	8 Module	Each	200	10	2000
16	3.6.6	12 Module	Each	267	4	1068

16	3.7.A	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP A				
16	3.7.A.1	6Amps one way.	Each	63	21	1323
16	3.7.A.2	6Amps Two way.	Each	87	2	174
16	3.7.A.3	6Amps 3way socket.	Each	95	13	1235
16	3.7.A.4	Stepped Fan Regulator.	Each	286	10	2860
16	3.7.A.7	16Amps one way switch	Each	114	5	570
16	3.7.A.10	6/16Amps universal socket	Each	147	5	735
16	3.7.A.11	TV/Telephone socket	Each	82	1	82
16	3.7.A.12	RJ45/ I.O. outlet	Each	204	1	204
17	3.12	Supplying 50mm wooden plug, tapered from 50x50mm to 25x25mm and fixing by using binding wire before concreting a roof slab.	No	6.8	300	2040
	4.00	**LUMINAIRS/LIGHTS FIXTURES & ACCESSORIES**				
20	4.4	Supplying and fixing cast Aluminum round or oblong type bulk head fitting with GI wire guard, glass cover with 15Watts 230V CFL lamp.	Each	952	5	4760
24	4.23	Supplying CFL mirror light fitting with 1x11W CFL lamp, choke, Perspex cover and completely wired for use on 230V 50Hz AC supply.	Each	648	2	1296
25	4.29	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical condition				
25	4.29.2	LED light fighting 4' - 28 watts	Each	1774	40	70960
25	4.31	Supply of recess mounted rolling type LED square or round Down light 12 watts with 4/6W GU 10 LED Lamp Rib Fabricated from Die cast aluminum with white powder coated prewired to mains connector with suitable driver & having swiveling unit of aluminum die cast eye ball & LED Lamp position retained by circular wire spring. 5 years Warranty against any manufacturing defect working under standard electrical condition.	No	1868	5	9340
25	4.32	Supply of LED Square Recessed Down lighter with 18W System Wattage. Housing shall be with powder coated pressure die cast aluminum alloy with corrosion resistant polyester powder coat & with extended heat sink. Diffuser/cover made of Lexan plastic material. Rated life shall be L70 @ 50000 Hrs. which shall has inbuilt electrical protection like over/under voltage, short circuit, overload, open circuit & miswiring. Driver is on constant current driver output driver @ 0.06A with PF > 0.9 with line voltage @ 220-240V @ 50/60Hz, driver efficiency > 85% & THD<15%. LED Efficiency > 130 lm/W at 1W & Fixture Efficiency >75lm/w with CRI > 75 with injection moulded Polycarbonate lens. 5 years Warranty against any manufacturing defect working under standard electrical condition.	No	4945	2	9890
	6.00	**CONTROL SWITCH GEARS & ACCESSORIES**				
44	6.7	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.				
45	6.7.4	100Amps	Each	360	6	2160
45	6.11	Supplying of on load change over switches 4 poles, AC-23A Duty, 415V, 50Hz, AC Supply.				
45	6.11.2	100-125Amps	Each	6426	1	6426
46	6.13.B	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) FOUR POLE				
46	6.13.B.7	125-160Amps 25kA.	Each	7372	2	14744
46	6.14	Supplying and fixing of Shunt trip suitable for MCCB.CBCT.	Each	1486	3	4458
47	6.16	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.				
47	6.16.1	5-32Amps SP	Each	418	13	5434
47	6.16.4	40-63Amps DP	Each	1093	3	3279
47	6.16.6	40-63Amps TPN	Each	1936	3	5808
47	6.17.II	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.II - Double Door				
47	6.17.II.6	12Way SP &N	Each	1622	3	4866
47	6.17.III	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.III - Double Door				
47	6.17.III.7	4Way TP &N	Each	2399	2	4798

47	6.18	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board.				
47	6.18.2	32-40 Amps 2 pole	Each	2623	3	7869
47	6.18.3	32-40 Amps 4 pole	Each	2936	1	2936
47	6.18.4	63 Amps 4 pole	Each	3350	1	3350
47	6.19	Supplying, fixing and wiring earth leakage relay with core balanced current transformer suitable for single phase 50 Hz AC with latest microcontroller based, digital readout of percentage leakage current, programmable delay/auto/manual reset facility suitable to mount on DIN rail/ flush mounting on panel board.	Each	7998	1	7998
48	6.2	Supplying, fixing and wiring 0 to 600Volts 96x96mm AC Voltmeter on existing panel/wood board.	Each	390	1	390
48	6.23	Supplying, fixing and wiring 0 to 100amps Direct Reading AC analog type Ammeter	Each	452	1	452
48	6.25	Supplying, fixing and wiring rotary selector switch suitable for Ammeter.	Each	172	1	172
48	6.26	Supplying, fixing and wiring rotary selector switch suitable for Voltmeter.	Each	140	1	140
48	6.31	Supplying of multi function digital meter with three line back light LCD type display for voltage, Current, frequency, Power, power factor, KVA, KWH,KVAR suitable for 3 phase, 4 wire LT network with IP 54 degree of protection and completely wired as required with communication Port and Class 0.5s accuracy.	Each	8003	1	8003
48	6.36	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C. 50 Hz 12/24v D.C.	Each	442	2	884
49	6.38	Supplying ..... amps rated 3phase with neutral bus bar using required capacity electrolytic aluminum strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.				
49	6.38.1	100Amps 4x30x6mm Aluminum Strips	Mtr	2135	2	4270
49	6.39	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.				
49	6.39.1	40x40x6mm	Mtr	263	4	1052
49	6.4	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete.				
49	6.40.1	14SWG	sq.cms	0.37	5000	1850
	7.00	**L.T.U.G CABLE**				
55	7.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia	No	2727	2	5454
55	7.2	Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts.	No	4317	2	8634
55	7.3.A	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. GI strip				
55	7.3.A.1	25x3mm	Mtr	77	20	1540
55	7.3.A.5	600x600x3mm GI Plate	Each	784	4	3136
55	7.4	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.				
55	7.4.2	4 core 10 sqmm	Mtr	118.8	15	1782
55	7.4.4	4 core 16 sqmm	Mtr	140.4	10	1404
61	7.8.B	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure				
61	7.8.B.6	6 sqmm to 16 sqmm	Mtr	31	30	930
61	7.8.B.7	25 sqmm to 75 sqmm	Mtr	34.8	150	5220
61	7.9	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)				
62	7.9.1	In soil (ordinary)	Mtr	78	30	2340

62	7.9.4	Asphalt cutting	Mtr	117	5	585
62	7.1	Providing and filling sand in excavated trench to cover already laid UG cable to a depth of 150mm all-round the cable.	Mtr	103	30	3090
62	7.14	Supplying and fixing of heavy duty cable glands suitable for UG cable of 1.1 KV class (metal only)				
62	7.14.2	25mm dia	Each	86	2	172
62	7.14.3	32mm dia	Each	122	2	244
63	7.19	Supplying and fixing 2mm thick perforated cable tray with powder coated paint on existing MS angle support using necessary GI bolts/nuts and washer or welding as required.				
63	7.19.2	300x50mm	Mtr	547	5	2735
63	7.2	Supply and laying double walled corrugated (DWC) HDPE Pipe including all necessary connecting Sockets/Couplings/Tees/Bends/End-caps of same materials in existing trench as per IS 14930 part -II suitable for drawing underground cables.				
63	7.20.1	40mm OD / 32mm ID	Mtr	98	50	4900
63	7.20.2	50mm OD / 38mm ID	Mtr	151	40	6040
64	7.21	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes.				
64	7.21.1	1.5 sqmm	Each	2	30	60
64	7.21.2	2.5 sqmm	Each	3.12	20	62.4
64	7.21.3	4 sqmm	Each	6.25	10	62.5
64	7.21.4	6 sqmm	Each	6.25	8	50
64	7.21.5	10 sqmm	Each	7.65	15	114.75
64	7.21.6	16 sqmm	Each	11.31	4	45.24
64	7.21.8	35 sqmm Long Barrel	Each	35.72	4	142.88
64	7.22.A	Supplying and running GI/Copper conductor for grounding and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/spacers etc. GI Wire				
64	7.22.A.3	8 SWG	Mtr	19.5	50	975
	11.00	**NETWORKING & TELECOMMUNICATION**				
85	11.2	Supplying and drawing PVC flexible one pair telephone unarmoured tinned copper cable.				
85	11.2.2	2Pair	Rmt.	13	50	650
					GRAND TOTAL AMOUNT	**341,845**

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2014-2015.

Assistant Engineer
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22/5/17

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK :CONSTRUCTION OF HOSPITAL BUILDING IN WARD NO. 11 (KUVEMPUNAGARA) IN VIDYARANYAPURA SUB DIVISION

(4) PLUMBING

							Est.Cost.Rs.	**344,478.96**
Sl No	**Description**	**Units**	**Rates**	**Area Weightage**	**Total Rate (RS.)**	**Quantity**	**Amount (RS.)**
DRAINAGE WORK								
1	KSRB 12-8.1: Constructing brick masonry inspection chamber 600x600mm and 450mm depth, (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 455x610mm internal dimensions, total weight of cover with frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg) R.C.C top slab with cement concrete M 15 with 20mm and down size granite metal, foundation concrete M5 with 40mm and down size granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, HOM of machineries complete as per specifications. Specification no. KBS	Nos	8,954.00	716.32	9,670.32	2	19340.64
2	Providing and fixing unplasticised PVC pipes 10.00 kg/sq.cm working pressure chemp plast/wavin or equivalent make with pipe fittings, clips, making good the floor , including cost of all materials, labour charges, HOM of equipment and testing complete as per specifications.						
a	do- with 90mm outer dia	m	481	38.48	519.48	20	10389.6
b	do- with 110mm outer dia	m	688	55.04	743.04	13	9659.52
c	do- with 160mm outer dia	m	1,450.00	116.00	1,566.00	9	14094
SANITARY WORK							
3	KSRB 11-5 : Providing and fixing white vitreous china clay, **water closet europeon type** (pedestal type, p-trap) with black solid plastic seat and lid, C.P brass hinges, rubber buffers. 10 litre low level,P.V.C flushing cistern (all are approved make) with fittings, C.I / M.S brackets , 40mm diameter flush pipe fittings and clamps, overflow arrangements with specials and 25mm mosquito proof coupling of approved design,painting of fittings and brackets, cutting and making good the wall and floor wherever required , including cost of materials, labour complete as per specifications. Specification no.KBS 11	Each	5,130.00	410.40	5,540.40	19	105267.6
4	KSRB 11-9.2 : Providing and fixing white vitreous china clay,flat back or half stall **urinal basin** of size 580x380x350mm in the range of two with 7.5 litres P.V.C automatic flushing cistern, C.I / M.S brackets ,standard flush pipe and C.P brass spreaders with brass unions and G.I clamps, C.I trap with outlet grating and other couplings in C.P brass, painting of fittings and brackets, cutting and making good the wall and floor wherever required , including cost of materials, labour complete as per specifications.Specification No. KBS 11	Unit	8,315.00	665.20	8,980.20	4	35920.8
5	KSRB 11.11.1 : Providing and fixing white vitreous china clay,flat back **wash basin** size 630x450mm with a pair of 15mm C.P brass pillar taps with C.I / M.S brackets ,32mm C.P brass waste of standard pattern, painting of fittings and brackets, cutting and making good the wall and floor wherever required , including cost of materials, labour complete as per specifications. Specification No. KBS 11	Unit	3,886.00	310.88	4,196.88	13	54559.44
6	KSRB 11.17.1: Providing and fixing C.P brass towel rail 740mm length, 20mm dia with C.P brackets, fixed to wooden cleats with C.P brass screws including cost of materials, labour complete as per specifications.	Unit	783	62.64	845.64	2	1691.28

7	Providing wash basin brackets of approved 1st qyuality and make confirming to ISI specifications and fixing for low down cistern as directed. Rate includes cost of materials and conveyance to work spot.	Pair	228	18.24	246.24	13	3201.12
8	Providing pedestal for wash basin of approved 1st qyuality and make confirming to ISI specifications and fixing for low down cistern as directed. Rate includes cost of materials and conveyance to work spot.	Each	875	70.00	945.00	13	12285
9	Providing and fixing 7.5 cms to 15.00 cms dia NP grating 100 mm dia.	Each	160.00	12.80	172.80	26	4492.8
10	Providing **stoneware gully trap** of approved quality and make fixing in M-15 and plastering with CM 1:3 wherever necessary. (Rate includes cost of all materials, fixtures and lead). 15x15cms	Each	270	21.60	291.60	4	1166.4
11	Providing and fixing to wall, ceiling and floor unplasticised PVC 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials,labour charges, HOM of acquirements and testing complete as per specifications.For Rain water pipe. 110 mm dia	m	412	32.96	444.96	10	4449.6
	do- 160mm dia	m	830	66.40	896.40	20	17928
WATER SUPPLY WORK							
12	KSRB-13-6.1-2 : Providing and fixing in position brass bib cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.Specification no. KBS 13.2.2/ 13.3	Each	243	19.44	262.44	2	524.88
13	KSRB-13-6.2-2 : Providing and fixing in position brass stop cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.Specification no. KBS 13.2.2/ 13.3	Each	160	12.80	172.80	18	3110.4
14	KSRB-13-6.3-2 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.Specification no. KBS 13.2.6/ 13.3	Each	409	32.72	441.72	2	883.44
a	KSRB 13.6.3-3: do- 25mm dia nominal bore	Each	590.00	47.20	637.20	1	637.2
b	KSRB-13-6.2-4 : –do– 32mm nominal bore	Each	950.00	76.00	1,026.00	3	3078
c	KSRB-13-6.3-5 : –do– 40mm nominal bore	Each	1270.00	101.60	1,371.60	2	2743.2
d	KSRB-13-6.3-7 : –do– 65mm nominal bore	Each	2560.00	204.80	2,764.80	1	2764.8
15	KSRB-13-6.6-1 : Providing and fixing unplasticised PVC connection pipe with brass union 15mm nominal bore 300 mm length of PVC connection including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS	Set	263.00	21.04	284.04	12	3408.48
16	KSRB-13-7.1-1 : Providing and fixing in position 40mm nominal bore non return valve vertical type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications.Specification no. KBS 13.2.10/ 13.13	Nos	1,435.00	114.80	1,549.80	2	3099.6
a	KSRB 13.9.2: do- 40mm dia	m	263	21.04	284.04	20	5680.8
b	KSRB 13.9.4: do- 63mm dia	m	348	27.84	375.84	5	1879.2
	CONSIDERED FOR DRAINAGE TO CHECK WITH KHB						
17	KSRB-13-11.1 : Providing and placing on terrace, polyethylene water storage tanks with manhole lid and suitable locking arrangements, making holes of suitable diameter for inlet, outlet and over flow pipes, including cost of all materials, labour, transport charges, HOM of equipments and testing complete as per specifications. (For 1000 Litre capacity) as per IS 12701 1996. Specification No. KBS 13.22	Each	8467	677.36	9,144.36	1	9144.36

18	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for not and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.,)						
a	15mm nominal OD pipes	m	130.00	10.40	140.40	2	280.8
b	20mm nominal OD pipes	m	210	16.80	226.80	15	3402
c	25mm nominal OD pipes	m	250	20.00	270.00	10	2700
d	32mm nominal OD pipes	m	310	24.80	334.80	20	6696
	GRAND TOTAL:						344,478.96

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017.

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NAME OF WORK :CONSTRUCTION OF HOSPITAL BUILDING IN WARD NO. 11 (KUVEMPUNAGARA) IN VIDYARANYAPURA SUB DIVISION

DRAFT TENDER SCHEDULE

Sl. No.	Description of Work	Unit	Quantity	Rate in Figures	Rate in Words
1	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the exavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications	Cum	674.86		
2	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.	Cum	44.05		
3	Providing and laying in position plain cement concrete of mix 1:4:8(M7.5)with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregtes @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	67.51		
4	Providing and laying in position plain cement concrete of mix M15 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	151.54		
5	Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammerddressed in courses not less than 20 cms high, bond stones at 2m apart in each course including cost of materials, labour, curing completeas per specifications and as per the directions of the Engineer-in-charge of the work	Cum	17.50		

6	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	198.94		
7	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons and as per the directions of the Engineer-in-charge of the work .	Sqm	427.32		
8	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness , including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons and as per the directions of the Engineer-in-charge of the work .	Sqm	95.73		
9	Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work (GROUND & BASEMENT FLOOR)	Sqm	359.07		
10	Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work (FIRST FLOOR)	Sqm	185.79		
11	Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work (SECOND FLOOR)	Sqm	185.79		

12	Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work (HEADROOM	Sqm	33.60		
13	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (GROUND & BASEMENT FLOOR)	Sqm	1598.67		
14	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (FIRST FLOOR)	Sqm	620.43		
15	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (SECOND FLOOR)	Sqm	620.43		
16	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (HEADROOM)	Sqm	34.16		
17	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications and as per the directions of the Engineer-in-charge of the work . (GROUND & BASEMENT FLOOR)	Sqm	36.32		
18	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications and as per the directions of the Engineer-in-charge of the work . (FIRST FLOOR)	Sqm	16.34		

19	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications and as per the directions of the Engineer-in-charge of the work . (SECOND FLOOR)	Sqm	16.34		
20	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floors including cost of all materials,labour complete as per specifications and as per the directions of the Engineer-in-charge of the work . (HEADROOM)	Sqm	3.51		
21	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specificaitons and as per the directions of the Engineer-in-charge of the work (GROUND & BASEMENT FLOOR)	Sqm	958.51		
22	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specificaitons and as per the directions of the Engineer-in-charge of the work (FIRST FLOOR)	Sqm	500.82		
23	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specificaitons and as per the directions of the Engineer-in-charge of the work (SECOND FLOOR)	Sqm	500.46		
24	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1m in depth including cost of all materials, labour complete as per specificaitons and as per the directions of the Engineer-in-charge of the work (HEADROOM)	Sqm	29.04		

25	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for Stairs (excluding landing) except spiral staircase including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work (GROUND & BASEMENT FLOOR)	Sqm	142.92		
26	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for Stairs (excluding landing) except spiral staircase including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (FIRST FLOOR)	Sqm	30.57		
27	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for Stairs (excluding landing) except spiral staircase including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work (SECOND FLOOR)	Sqm	30.57		
28	Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc. , including edges including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (GROUND FLOOR)	Sqm	24.60		
29	Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc. , including edges including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (FIRST FLOOR)	Sqm	34.50		
30	Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc. , including edges including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (SECOND FLOOR)	Sqm	30.36		
31	Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc. , including edges including cost of all materials, labour complete as per specificaiton and as per the directions of the Engineer-in-charge of the work . (HEADROOM)	Sqm	0.96		

32	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregtes @ 0.47cum, with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and First Floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications and as per the directions of the Engineer-in-charge of the work .	Cum	156.22		
33	Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in Ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars, posts, struts. butters, string or lacing courses , parapets, coping, bed blocks, anchor blocks ,plain window cills, fillets including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.ets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications and as per the directions of the Engineer-in-charge of the work . (GROUND & BASEMENT FLOOR)	Cum	55.98		

34	Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in First Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars, posts, struts. butters, string or lacing courses , parapets, coping, bed blocks, anchor blocks ,plain window cills, fillets including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.ets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications and as per the directions of the Engineer-in-charge of the work . (FIRST FLOOR)	Cum	32.19		
35	Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in Ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars, posts, struts. butters, string or lacing courses , parapets, coping, bed blocks, anchor blocks ,plain window cills, fillets including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.ets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications and as per the directions of the Engineer-in-charge of the work . (SECOND FLOOR)	Cum	32.20		

36	Providing and laying in position reinforced cementconcrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum andfine aggregtes @ 0.47cum,with superplastisiser @3lts confirming to IS 9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick,vibrated fo all works in Ground Floor level for roof slabs ,staircase, lintels , beams, retaining walls ,return wall, walls (an thivck ness) including attached plasters ,columns, pillars, posts, struts. butters, string or lacing courses , parapets, coping, bed blocks, anchor blocks ,plain window cills, fillets including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.ets including cost of all materials, labour,HOM of machinery, curing, complete as per specifications and as per the directions of the Engineer-in-charge of the work . (HEADROOM)	Cum	3.26		
37	Providing and laying cement concrete using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) for R.C.C works laid in 15 cms thick layers and well compacted vibrating, curing, finishing with necessary cement mortar,with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges) Ready mixed cement for concrete for beams,staircase,and roof with M-25 and as per the directions of the Engineer-in-charge of the work .	Cum	726.27		
38	Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 27.20kgs, with 12mm and down size graded granite metal coarse aggregates @0.5865cum and fine aggregtes @ 0.391cum, with superplastisiser @0.225lts, machine mixed, well compacted for plain chajja of 8.5 cms. average thickness, upto First Floor level, including cost of all materials, labour, HOM of machinery, finishing, curing, complete as per specifications and as per the directions of the Engineer-in-charge of the work (GROUND FLOOR)	Sqm	19.23		